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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,962	07/06/2001	Ali N. Saleh	M-9838 US	4375

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EXAMINER

PATEL, DHAIRYA A

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,962

Applicant(s)

SALEH ET AL.

Examiner

Dhairya A Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/3/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communication filed on 12/3/2004. This amendment has been entered and fully considered. Claims 1-45 are subject to examination
2. The objection to disclosure cited in the previous office action is withdrawn
3. The rejection to the claims 4-5,7-8,12-13,15-16,20-21,23-24,28-29,31-32,36-37,39-40 under 35 U.S.C 112 second paragraph is withdrawn.
4. Applicant's arguments filed on December 3, 2004 have fully considered but they are not deemed to be persuasive.
5. Applicant's arguments filed on December 3, 2004 have been fully considered but deemed to be moot in view of new ground rule rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-45 rejected under 35 U.S.C. 103(a) as being unpatentable over Arslan et al. U.S. Patent # 5,444,693 in view of Hsing et al. U.S. Patent # 6,167,025 (hereinafter Hsing).

As per claim 1, Arslan teaches a method for restoring a path in a communication system between zones comprising:

- establishing an inter-zone link with a first border node of source zone (column 3 line 21-22) with a second border node of an adjacent destination zone (column 3 lines 20-23);

Interzone link in this case is referred to as links 113-3 through 113-6, which connects DACS II (first border node) of the source zone, which comprises of (DACS II 110-1 to 110-3) to DACS IV (second border node) of an adjacent destination zone, which comprises of (DACS IV 2000 109-1 to 109-6).

The applicant argues that “network levels” of Arslan do not teach or suggest zones (e.g., a source zone or adjacent destination zone). Examiner interprets “network levels” as zones because in claim 1, it is not listed that zones execute a separate copy of a topology distribution algorithm within each zones or that topological or other information is divided or distributed among zones.

As per establishing an inter-zone link, Arslan teaches Inter-zone link is referred to as links 113-3 through 113-6, which is connecting DACS II (zone 1)(source zone) to DACS IV (zone 2 adjacent destination zone).

-identifying an inter-zone link failure (column 7 line 7-9) between source zone and the adjacent destination zone (column 7 lines 7-24);

Identifying interzone link failure is the link 113-5 which connects DACS II 110-3 (source zone) to DACS IV-2000 109-2 (adjacent destination zone). Identifying the link has failed an alarm gets triggered indicating at least a portion of a particular circuit has failed (column 7 lines 10-18).

-identifying a planned alternative route (column 11 lines 62-69)

The reference teaches identifying route 3 as being a planned alternative route
-informing a node in the adjacent destination zone of the planned alternative route (column 11 lines 62-69)

The reference teaches identifying route 3 as the planned alternative and forwards it to adjacent node DACS III-200 107-2 (node in the adjacent destination zone) and DACS II 110-2.

-informing a node of the source zone of the planned alternative route (column 11 lines 62-69);

The reference teaches DACS II 110-2 is being informed about the planned alternative route, DACS II 110-2 is a node of the source zone since all DACS II's make up a source zone.

-providing communication between the adjacent destination zone and the source zone via the planned alternative route

The reference teaches communication between planned alternative route is providing when planned alternative route is picked and received by DACS II 110-2 and checks for an available digroup and channel that connect back to DACS IV 2000 (providing communication between adjacent destination zone and the source zone). It also states first step to restore the circuit to continue DACS IV 2000 109-1 (destination zone) via link 111-10 to DACS II 110-3 (source zone) via link 113-6.

Arsilan fails to teach a pre-planned alternative route. Hsing teaches a pre-planned alternative route. (Fig. 3A, 3B, 3C) where in the routing table alternative routes are listed next to the primary route incase there is link failure. It would have been

obvious to one of ordinary skill in the art at the time of applicant's invention to implement Arslan's invention in Hsing's invention to come up with a pre-planned alternative route. The motivation for doing so would have been to save time so when there is a link failure and the alternative route is pre-planned it would save because packets or data and directly be forwarded to pre-planned alternative route.

As to the remark, Applicant asserts that Arslan teaches the dynamic identification of nodal pathways directly away from use of "pre-planned" alternative routes as claimed.

Examiner respectfully traverses Applicant's argument to "pre-planned" as stated in the claims limitation, the term "pre-planned" is not limited to when the pre-planning was done as in is the pre-planning done after the inter-zone link failure or "pre-planned" before inter-zone link failure. Therefore, Arslan teaching meet the limitations for "pre-planned alternative route".

As per claim 2, Arslan teaches the method of claim 1, further comprising:

-routing the planned alternative route through a transit zone. (column 11 lines 47-50).

The reference teaches routing the planned alternative route (route 3) through a transit zone (DACS III-200 107-2 is in a transit zone) and since route 3 goes through DACS III-2000 107-2.

Arslan fails to teach "pre-planned" alternative route. Hsing teaches a pre-planned alternative route. (Fig. 3A, 3B, 3C) where in the routing table alternative routes are listed next to the primary route in case there is link failure. It would have been

obvious to one of ordinary skill in the art at the time of applicant's invention to implement Arslan's invention in Hsing's invention to come up with a pre-planned alternative route. The motivation for doing so would have been to save time so when there is a link failure and the alternative route is pre-planned it would save because packets or data and directly be forwarded to pre-planned alternative route.

As per claim 3, Arslan teaches a method of claims 2 further comprising:

-requesting new paths to be established between zone. (column 14 lines 58-61).

When restoration processor checks DACS II 110-2 for an available digroup and channel to connect back to DACS IV-2000 109-3 via link 113-4, it is referring to new path (link 113-4) between zone (since DACS IV and DACS II belong in different zone).

As per claim 4, Arslan teaches the method of claim 3 wherein the planned alternative route is configured based on class of service requirements. (column 11 lines 38-67)

The reference teaches the planned alternative route is configured based on cost of employing an alternative link to the destination. (configured based on class of service requirements).

Arslan fails to teach "pre-planned" alternative route. Hsing teaches a pre-planned alternative route. (Fig. 3A, 3B, 3C) where in the routing table alternative routes are listed next to the primary route in case there is link failure. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Arslan's invention in Hsing's invention to come up with a pre-planned alternative route. The motivation for doing so would have been to save time so when there is a link failure

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and the alternative route is pre-planned it would save because packets or data and directly be forwarded to pre-planned alternative route.

As per claim 5, Arslan teaches the method of claim 2 wherein the planned alternative route is configured based on class of service requirements. (column 11 lines 38-67)

The reference teaches the planned alternative route is configured based on cost of employing an alternative link to the destination. (configured based on class of service requirements).

Arslan fails to teach "pre-planned" alternative route. Hsing teaches a pre-planned alternative route. (Fig. 3A, 3B, 3C) where in the routing table alternative routes are listed next to the primary route incase the there is link failure. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Arslan's invention in Hsing's invention to come up with a pre-planned alternative route. The motivation for doing so would have been to save time so when the there is a link failure and the alternative route is pre-planned it would save because packets or data and directly be forwarded to pre-planned alternative route.

As per claim 6, Arslan teaches the method of claim 1 further comprising:

-establishing new paths(column 15 line 8) to be established between zones.(column 15 lines 8-21).

As per claim 7, Arslan teaches the method of claim 6 wherein the planned alternative route is configured based on class of service requirements. (column 11 lines 38-67)

The reference teaches the planned alternative route is configured based on cost of employing an alternative link to the destination. (configured based on class of service requirements).

Arslan fails to teach "pre-planned" alternative route. Hsing teaches a pre-planned alternative route. (Fig. 3A, 3B, 3C) where in the routing table alternative routes are listed next to the primary route incase the there is link failure. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Arslan's invention in Hsing's invention to come up with a pre-planned alternative route. The motivation for doing so would have been to save time so when the there is a link failure and the alternative route is pre-planned it would save because packets or data and directly be forwarded to pre-planned alternative route.

As per claim 8, Arslan teaches the method of claim 1 wherein the planned alternative route is configured based on class of service requirements. (column 11 lines 38-67)

The reference teaches the planned alternative route is configured based on cost of employing an alternative link to the destination. (configured based on class of service requirements).

Arslan fails to teach "pre-planned" alternative route. Hsing teaches a pre-planned alternative route. (Fig. 3A, 3B, 3C) where in the routing table alternative routes are listed next to the primary route incase the there is link failure. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Arslan's invention in Hsing's invention to come up with a pre-planned alternative route. The

motivation for doing so would have been to save time so when there is a link failure and the alternative route is pre-planned it would save because packets or data and directly be forwarded to pre-planned alternative route.

As per claims 9-16 respectively, teaches same limitations as claims 1-8 respectively therefore rejected under same basis.

As per claims 17-24 respectively, teaches same limitations as claims 1-8 respectively therefore rejected under same basis.

As per claims 25-32 respectively, teaches same limitations as claims 1-8 respectively therefore rejected under same basis.

As per claims 33-40 respectively, teaches same limitations as claims 1-8 respectively therefore rejected under same basis.

As per claim 41, Arslan teaches the method of claim 1, further comprising:

-identifying an intra-zone failure within at least one of said source zone and said adjacent destination zone (column 7 lines 7-24);

The reference teaches link failure of 113-5 (intra-zone failure) is identified within at least one of DACS II 110-3 (source zone) to DACS IV 2000 109-2 (adjacent destination zone) with an alarm trigger.

-dynamically identifying an alternative route using a distributed restoration process associated with said at least one of said source zone and said adjacent zone (column 11 lines 38-67).

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The reference teaches updating lowest cost route (dynamically identifying alternative route) to use for alternative route and using the restoration process between the DACS II and DACS IV and DACS III.

As per claims 42,43,44,45 they same limitations as claim 41, therefore rejected under same basis.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A). "System for restoration of communication networks" by Arslan et al. U.S. Patent # 5,444,693

B). "Method and Apparatus for restoring connections in an ATM network" by Hsing et al. U.S. Patent # 6,167,025

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhairya A Patel whose telephone number is (571) 272-4066. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAP


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER